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EXAMINER DESR, PIERRE LOUIS				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/772,887

**Applicant(s)**

CHIAM ET AL.

**Examiner**

PIERRE-LOUIS DESIR

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 23-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on 02/17/2009 have been fully considered but they are not persuasive.

First it should be noted the same argument was made in the previous letter received from the applicants. In the present Remarks, applicants state that Landers requires a user to press a soft key to perform the indicated action, such as composing to one of a list of buddies. Landers, continue applicants, merely teaches a navigation routine allowing a user to move to a submenu and would not allow the user to select and perform the indicated submenu item without having to press a soft key.

Examiner respectfully disagrees.

Landers discloses that a first navigation routine may also be invoked in the up direction by pressing the "up" arrow of the navigation key. For example, if the point of focus is in menu 16, such as on the fifth menu item of menu 16 (see FIG. 1), pressing the up arrow can move the point of focus to the fourth menu item, and the routine will be in state 28. In state 28, repeatedly pressing the up arrow will move the point of focus through menu items from the last (e.g., the fifth) toward the first until the first item is reached. At that point, pressing the up arrow will move the point of focus to menu 16 (i.e., menu label 18c), and the system will be in state 24. Pressing the up arrow again will move the point of focus to another menu or object (in this example, display object 14), and the system will again be in state 22 (see col. 5, lines 7-20. Also refer to col. 2, line 64-col. 3, line 19).

As can be seen above, there are multiple menus, i.e., menus 10, 12, and 16, wherein menu 10 could be graphically displayed above menu 12, which could in turn be above object 14, which could be above menu 16. Any of those menus may be selected by pressing the down arrow to move the point of focus to a selected menu, i.e., menus 10, 12, and 16. When a menu is selected, the user will access menu elements (i.e., submenu). And, when a submenu is selected, the object associated with the submenu is displayed (i.e., action performed) (see figs. 1-2).

Thus, the functionality of the navigation routine is changed depending on where the point of focus is. The system disclosed by Landers allows users to simply continue to scroll down once the last menu is reached to move the point of focus to successive items in the last menu wherein action is performed.

Also, it should be noted that Landers discloses that action may be executed on a particular menu, object, or item by executing a navigation routine or pressing a soft key when the point of focus is on the main menu, object, and sub-menu (see col. 6, lines 4-22). Thus, the selection and execution of action may be done by executing a navigation routine or pressing a soft key when the point of focus is on the main menu, object, and sub-menu.

Applicants argue that no motivation can be found in the teachings of either of the references. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir.

1992). In this case, as disclosed in the previous action, a motivation for combining would have been to provide a navigation routine capable of reducing keystrokes and make the interface easier to use and more intuitive (see Landers' col. 4, lines 16-17).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-15 and 17, 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamadera (previously cited) in view of Landers (previously disclosed).

Regarding claim 1, Yamadera discloses a menu-driven electronic device (Figure 1) comprising:

a. a display configured to selectively display one of a plurality of menus (Figure 1, element 10), including a main menu and a sub-menu (Figures 7A to 7D) and

b. a two-dimensional navigation key including four sets of contact points (Figure 1, element 4), wherein the two dimensional navigation key is configured to select one of a plurality of main menu items of the main menu (paragraphs 42 and 59 to 63 and 76 to 82) and to select and perform an action corresponding to a sub-menu item of the sub-menu associated with a selected main menu item (Id.).

Although Yamadera discloses a device as described, Yamadera does not specifically disclose a device wherein the two dimensional key is configured as a single button and wherein the four sets of contact points are used to select and perform an action corresponding to one of a plurality of main menu items.

However, Landers discloses a mobile station that includes a menu display routine which can be executed by a processor to display a set of menus. The set of menus will range from a first menu to a last menu, and at least one menu of the set defines, in turn, a set of menu items. Each set of menu items can similarly range from a first menu item to a last menu item (see col. 2, lines 3-10).

Thus, Landers discloses a set of menu and sub-menu.

Now, in regard to how to access the menu and sub-menu items, the following has been disclosed.

The mobile station may also include a "point of focus" routine stored in the data storage. The point of focus routine is executable by the processor to provide a single point of focus in or on one of the menus. The mobile station may also include a navigation routine stored in the data storage, which is executable by the processor. The processor executes the navigation routine in response to user invocation. When the point of focus is on a particular menu other than the last

menu, user invocation of the navigation routine causes the processor to move the point of focus to a menu other than that particular menu. When the point of focus is on the last menu, user invocation of the navigation routine causes the processor to move the point of focus to a menu item in the last menu. Col. 2, lines 12-24.

Thus, using a navigation routine, the last menu is selected when the point of focus is on it, which causes the processor to move the point of focus to a menu item in the last menu.

Landers also discloses that the navigation key may be used to allow a user to cycle through different objects, menus, or both, that are displayed on the device. When a GUI object or menu is in focus, the GUI's soft key labels can change accordingly. Pressing a key associated with the contextual soft key label will execute the indicated action on the object that is in focus. Col. 2, lines 53-63.

As can be seen above, after using the navigation key, which allows a user to cycle through different objects, menus, or both that are displayed on the device, a soft key is pressed to execute the indicated action on the object that is in focus.

Therefore, although Landers discloses using a two-dimensional key configured as a single button, a soft key is pressed to execute the indicated action.

However, Landers also discloses that the number of keystrokes required to perform a function when using a GUI can be reduced by changing the functionality of the navigation key depending on where the point of focus is.

A navigation routine stored in memory can be invoked to change the functionality. For example, pressing a down arrow (or another arrow) when the point of focus is on the last menu in a set of menus can move the point of focus to an item in that last menu. In contrast, pressing

the same key or arrow when the point of focus is on a menu other than the last menu will simply move the point of focus to another menu (i.e., to another menu at the same hierarchical level). (Explicitly selecting a menu without a navigation routine as described is typically done by pressing a soft key with an appropriate label. For example, a user could scroll to a widget labeled "Buddy List" and then press a soft key labeled "ok"). In contrast to existing user interfaces, the exemplary system allows users to simply continue to scroll down once the Buddy List menu (if it is the last menu) is reached to move the point of focus to successive "buddies" in the Buddy List menu. Col. 2, line 64-col. 3, line 19.

Therefore, Landers discloses that both a menu and sub-menu items can be selected and indicated action may be performed on the selected item using the navigation key.

In fig. 4, Landers illustrates a mobile station that may be used in accordance with these navigation principles. As shown, display 42 of mobile station 40 may include a main menu 44, a status indicator 46, and a buddy list menu 48. The mobile station 40 may also include soft keys 50 and 52, together with associated soft key label areas 50a and 52a on display 42 directly above the soft keys. Pressing a soft key executes a function indicated by the currently displayed soft key label. The mobile station 40 may also include a four-way navigation key 54. The display of mobile station 40 of FIG. 4 depicts the graphical user interface of a digital messaging application program that can be used in accordance with the present system.

If the "Compose to . . ." item in the Buddy List menu 48 is initially in focus as shown, the text of the item will appear light on a dark background to indicate the point of focus, whereas all other selectable text of the display 42 may be dark on a light or intermediate background. Generally, when a drop-down list of menu items is active (that is, when the user has navigated



to the top-level menu associated with the list), the background of the drop-down list may appear light to distinguish over the rest of the display background which may be at an intermediate contrast, as shown. The functions of the navigation routines described above apply to mobile station 40 where the Buddy List menu 48 is the last menu, status indicator 46 is an intermediate object at the same hierarchical level as menu 48, and main menu 44 is the first menu. Main menu 44 has an associated list of items that are not shown in the figure, but that can be shown when the menu is selected by executing a navigation routine or pressing a soft key when the point of focus is on the main menu. Col. 5, line 56-col. 6, line 22.

Thus, Landers discloses a mobile device comprising two soft keys and two-dimensional navigation key configured as a single button including four sets of contact points, wherein the four sets of contact points are used to select and perform an action corresponding to one of a plurality of main menu items and to select and perform an action corresponding to a sub-menu item of the sub-menu associated with a selected main menu item.

Although Landers discloses that soft key may be pressed to execute the indicated action on the object that is in focus, in order to reduce the number of keystrokes, the navigation key may be utilized to select both a menu and sub-menu items, wherein indicated action may be performed on the selected item using the navigation key

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Landers with the teachings of Yamadera to arrive at the claimed invention. A motivation for doing so would have been to provide a navigation routine capable of reducing keystrokes and make the interface easier to use and more intuitive.

Regarding claim 23, Yamadera discloses a menu-driven wireless telecommunications device (Figure 1) comprising:

- a. a display configured to selectively display at least one of a plurality of menus (Figure 1, element 10), including a main menu and a first sub-menu (Figures 7a to 7D), and
- b. a two-dimensional navigation key including four sets of contact points (Figure 1, element 4), wherein the two-dimensional navigation key is configured to select and perform corresponding to one of a plurality of main menu items of the main menu (paragraphs 42, 59 to 63 and 76 to 82), to select and perform an action corresponding to a first sub-menu associated with a selected main menu item (Id.), and further to select and perform an action corresponding to a second sub-menu item of the second sub-menu associated with the selected main menu item (Id.).

Although Yamadera discloses a device as described, Yamadera does not specifically disclose a device wherein the two dimensional key is configured as a single button and wherein the four sets of contact points are used to select and perform an action corresponding to one of a plurality of main menu items.

However, Landers discloses a mobile station that includes a menu display routine which can be executed by a processor to display a set of menus. The set of menus will range from a first menu to a last menu, and at least one menu of the set defines, in turn, a set of menu items. Each set of menu items can similarly range from a first menu item to a last menu item (see col. 2, lines 3-10).

Thus, Landers discloses a set of menu and sub-menu.

Now, in regard to how to access the menu and sub-menu items, the following has been disclosed.

The mobile station may also include a “point of focus” routine stored in the data storage. The point of focus routine is executable by the processor to provide a single point of focus in or on one of the menus. The mobile station may also include a navigation routine stored in the data storage, which is executable by the processor. The processor executes the navigation routine in response to user invocation. When the point of focus is on a particular menu other than the last menu, user invocation of the navigation routine causes the processor to move the point of focus to a menu other than that particular menu. When the point of focus is on the last menu, user invocation of the navigation routine causes the processor to move the point of focus to a menu item in the last menu. Col. 2, lines 12-24.

Thus, using a navigation routine, the last menu is selected when the point of focus is on it, which causes the processor to move the point of focus to a menu item in the last menu.

Landers also discloses that the navigation key may be used to allow a user to cycle through different objects, menus, or both, that are displayed on the device. When a GUI object or menu is in focus, the GUI's soft key labels can change accordingly. Pressing a key associated with the contextual soft key label will execute the indicated action on the object that is in focus. Col. 2, lines 53-63.

As can be seen above, after using the navigation key, which allows a user to cycle through different objects, menus, or both that are displayed on the device, a soft key is pressed to execute the indicated action on the object that is in focus.

Therefore, although Landers discloses using a two-dimensional key configured as a single button, a soft key is pressed to execute the indicated action.

However, Landers also discloses that the number of keystrokes required to perform a function when using a GUI can be reduced by changing the functionality of the navigation key depending on where the point of focus is.

A navigation routine stored in memory can be invoked to change the functionality. For example, pressing a down arrow (or another arrow) when the point of focus is on the last menu in a set of menus can move the point of focus to an item in that last menu. In contrast, pressing the same key or arrow when the point of focus is on a menu other than the last menu will simply move the point of focus to another menu (i.e., to another menu at the same hierarchical level). (Explicitly selecting a menu without a navigation routine as described is typically done by pressing a soft key with an appropriate label. For example, a user could scroll to a widget labeled "Buddy List" and then press a soft key labeled "ok"). In contrast to existing user interfaces, the exemplary system allows users to simply continue to scroll down once the Buddy List menu (if it is the last menu) is reached to move the point of focus to successive "buddies" in the Buddy List menu. Col. 2, line 64-col. 3, line 19.

Therefore, Landers discloses that both a menu and sub-menu items can be selected and indicated action may be performed on the selected item using the navigation key.

In fig. 4, Landers illustrates a mobile station that may be used in accordance with these navigation principles. As shown, display 42 of mobile station 40 may include a main menu 44, a status indicator 46, and a buddy list menu 48. The mobile station 40 may also include soft keys 50 and 52, together with associated soft key label areas 50a and 52a on display 42 directly above the soft keys. Pressing a soft key executes a function indicated by the currently displayed soft key label. The mobile station 40 may also include a four-way navigation key 54. The

display of mobile station 40 of FIG. 4 depicts the graphical user interface of a digital messaging application program that can be used in accordance with the present system.

If the "Compose to . . ." item in the Buddy List menu 48 is initially in focus as shown, the text of the item will appear light on a dark background to indicate the point of focus, whereas all other selectable text of the display 42 may be dark on a light or intermediate background. Generally, when a drop-down list of menu items is active (that is, when the user has navigated to the top-level menu associated with the list), the background of the drop-down list may appear light to distinguish over the rest of the display background which may be at an intermediate contrast, as shown. The functions of the navigation routines described above apply to mobile station 40 where the Buddy List menu 48 is the last menu, status indicator 46 is an intermediate object at the same hierarchical level as menu 48, and main menu 44 is the first menu. Main menu 44 has an associated list of items that are not shown in the figure, but that can be shown when the menu is selected by executing a navigation routine or pressing a soft key when the point of focus is on the main menu. Col. 5, line 56-col. 6, line 22.

Thus, Landers discloses a mobile device comprising two soft keys and two-dimensional navigation key configured as a single button including four sets of contact points, wherein the four sets of contact points are used to select and perform an action corresponding to one of a plurality of main menu items and to select and perform an action corresponding to a sub-menu item of the sub-menu associated with a selected main menu item.

Although Landers discloses that soft key may be pressed to execute the indicated action on the object that is in focus, in order to reduce the number of keystrokes, the navigation key

may be utilized to select both a menu and sub-menu items, wherein indicated action may be performed on the selected item using the navigation key

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Landers with the teachings of Yamadera to arrive at the claimed invention. A motivation for doing so would have been to provide a navigation routine capable of reducing keystrokes and make the interface easier to use and more intuitive.

Regarding claim 27, Yamadera discloses a menu-driven wireless telecommunications device (Figure 1) comprising a. a display configured to selectively display at least one of a plurality of menu trees (Figure 1, element 10), including a plurality of main menus, each having a plurality of sub-menus (Figures 7A to 7D); and b. a two-dimensional navigation key configured to operate along two orthogonal paths such that each of the orthogonal paths has two directions along the path wherein operating the key along a first of the orthogonal paths selects a preferred main menu from among the plurality of main menus (i.e., with the menu item selection screen 10c displayed, the user tilts the cursor key 4 in one of four directions--up, down, right, and left--to move the cursor 45 to one of the icons 11b, 11c, 11d, and 11e to select a menu item) (see fig. 1, element 4, and paragraph 77); operating the key along a second of the orthogonal paths selects a preferred sub-menu among the plurality of sub-menus (i.e., the second-hierarchical-level submenu items of the selected menu item are displayed in the direction perpendicular to the direction in which the cursor key 4 was tilted) (see paragraph 77); and operating the key along the first orthogonal path activates the selected sub-menu (i.e., the user tilts the cursor key 4 in the right direction as shown in FIG. 7B to select the icon 11d (menu item

24). Then, submenu items 26 and 27 that constitute the second hierarchical level of the menu item 24 are displayed as icons 11m and 11n in the direction (up and down directions) perpendicular to the direction in which the cursor key 4 was tilted. In FIG. 7B, the unselected icons 11b, 11c, and 11e are dimmed (indicated by broken lines in the figure), while the location where the cursor 45 was displayed before it was moved to the icon 11d, that is, the icon 11a indicated by hatching in the figure, remains displayed on the menu item selection screen 10c. This allows the user to understand how the cursor 45 moved. When the user tilts the cursor key 4 in one of up, down, right, and left directions with the screen in FIG. 7B displayed, the third-hierarchical-level submenu items composed of the lower level items of the second hierarchical level are displayed in the direction perpendicular to the direction in which the cursor key 4 was tilted. In this embodiment, the user tilts the cursor key 4 in the down direction as shown in FIG. 7C to select the icon 11n (submenu item 27). Then, the icon 11n moves and submenu items 28 and 29, which are third-hierarchical-level submenu items of the submenu item 27, are displayed on the sides of the moved icon 11n; that is, those icons are displayed as icons 11p and 11q in the direction (right and left directions) perpendicular to the direction in which the cursor key 4 was tilted) (see paragraphs 77-78).

Although Yamadera discloses a device as described, Yamadera does not specifically disclose a device wherein the two dimensional key is configured as a single button.

However, Landers discloses a mobile station that includes a menu display routine which can be executed by a processor to display a set of menus. The set of menus will range from a first menu to a last menu, and at least one menu of the set defines, in turn, a set of menu items. Each

set of menu items can similarly range from a first menu item to a last menu item (see col. 2, lines 3-10).

Thus, Landers discloses a set of menu and sub-menu.

Now, in regard to how to access the menu and sub-menu items, the following has been disclosed.

The mobile station may also include a "point of focus" routine stored in the data storage. The point of focus routine is executable by the processor to provide a single point of focus in or on one of the menus. The mobile station may also include a navigation routine stored in the data storage, which is executable by the processor. The processor executes the navigation routine in response to user invocation. When the point of focus is on a particular menu other than the last menu, user invocation of the navigation routine causes the processor to move the point of focus to a menu other than that particular menu. When the point of focus is on the last menu, user invocation of the navigation routine causes the processor to move the point of focus to a menu item in the last menu. Col. 2, lines 12-24.

Thus, using a navigation routine, the last menu is selected when the point of focus is on it, which causes the processor to move the point of focus to a menu item in the last menu.

Landers also discloses that the navigation key may be used to allow a user to cycle through different objects, menus, or both, that are displayed on the device. When a GUI object or menu is in focus, the GUI's soft key labels can change accordingly. Pressing a key associated with the contextual soft key label will execute the indicated action on the object that is in focus. Col. 2, lines 53-63.



As can be seen above, after using the navigation key, which allows a user to cycle through different objects, menus, or both that are displayed on the device, a soft key is pressed to execute the indicated action on the object that is in focus.

Therefore, although Landers discloses using a two-dimensional key configured as a single button, a soft key is pressed to execute the indicated action.

However, Landers also discloses that the number of keystrokes required to perform a function when using a GUI can be reduced by changing the functionality of the navigation key depending on where the point of focus is.

A navigation routine stored in memory can be invoked to change the functionality. For example, pressing a down arrow (or another arrow) when the point of focus is on the last menu in a set of menus can move the point of focus to an item in that last menu. In contrast, pressing the same key or arrow when the point of focus is on a menu other than the last menu will simply move the point of focus to another menu (i.e., to another menu at the same hierarchical level). (Explicitly selecting a menu without a navigation routine as described is typically done by pressing a soft key with an appropriate label. For example, a user could scroll to a widget labeled "Buddy List" and then press a soft key labeled "ok"). In contrast to existing user interfaces, the exemplary system allows users to simply continue to scroll down once the Buddy List menu (if it is the last menu) is reached to move the point of focus to successive "buddies" in the Buddy List menu. Col. 2, line 64-col. 3, line 19.

In fig. 4, Landers illustrates a mobile station that may be used in accordance with these navigation principles. As shown, display 42 of mobile station 40 may include a main menu 44, a status indicator 46, and a buddy list menu 48. The mobile station 40 may also include soft keys

50 and 52, together with associated soft key label areas 50a and 52a on display 42 directly above the soft keys. Pressing a soft key executes a function indicated by the currently displayed soft key label. The mobile station 40 may also include a four-way navigation key 54. The display of mobile station 40 of FIG. 4 depicts the graphical user interface of a digital messaging application program that can be used in accordance with the present system.

If the "Compose to . . ." item in the Buddy List menu 48 is initially in focus as shown, the text of the item will appear light on a dark background to indicate the point of focus, whereas all other selectable text of the display 42 may be dark on a light or intermediate background. Generally, when a drop-down list of menu items is active (that is, when the user has navigated to the top-level menu associated with the list), the background of the drop-down list may appear light to distinguish over the rest of the display background which may be at an intermediate contrast, as shown. The functions of the navigation routines described above apply to mobile station 40 where the Buddy List menu 48 is the last menu, status indicator 46 is an intermediate object at the same hierarchical level as menu 48, and main menu 44 is the first menu. Main menu 44 has an associated list of items that are not shown in the figure, but that can be shown when the menu is selected by executing a navigation routine or pressing a soft key when the point of focus is on the main menu. Col. 5, line 56-col. 6, line 22.

Also, it should be noted that Landers discloses that action may be executed on a particular menu, object, or item by executing a navigation routine or pressing a soft key when the point of focus is on the main menu, object, and sub-menu (see col. 6, lines 4-22). Thus, the selection and execution of action may be done by executing a navigation routine or pressing a soft key when the point of focus is on the main menu, object, and sub-menu.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings as described by Landers with the teachings of Yamadera to arrive at the claimed invention. A motivation for doing so would have been to provide a navigation routine capable of reducing keystrokes and make the interface easier to use and more intuitive (see col. 4, lines 16-17).

Regarding claim 2, Yamadera discloses a device (see claim 1 rejection) wherein at least a portion of the plurality of main menu items is displayed (Figure 1), and further wherein both the main menu and the sub-menu can be accessed by maintaining contact with the two-dimensional key. See paragraphs 60 and 62, it would be inherent that a user could navigate through the menus by maintaining contact with the navigation keys.

Regarding claim 3, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow navigation through the plurality of menus by using the two-dimensional navigation key. *Id.*

Regarding claim 4, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow navigation through the plurality of menus while maintaining tactile contact with the two-dimensional navigation key. See claim 2 and 3.

Regarding claim 5, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow toggling among the at least two control levels by a single access of the two-dimensional navigation key. See paragraphs 60 to 63.

Regarding claim 6, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow toggling between the main menu and one of the plurality of main menu items by using a first direction of the two-dimensional navigation key and to allow

toggling between the selected main menu item and the sub-menu associated with the selected main menu item by using a second direction of the two-dimensional navigation key. See e.g. paragraph 64.

Regarding claim 7, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to allow scrolling among at least two control levels by a single access of the two-dimensional navigation key. See paragraphs 60 to 64.

Regarding claim 8, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to display the selected main menu item simultaneously with the sub-menu associated with the selected main menu item. See Figure 7B and its corresponding description.

Regarding claim 9, Yamadera discloses a device (see claim 1 rejection) wherein the device is configured to display the selected main menu item simultaneously with a plurality of sub-menu items associated with the selected main menu item. See Figure 7B and its corresponding description.

Regarding claim 10, Yamadera discloses a device (see claim 1 rejection) wherein the plurality of menus are organized in a menu tree. See Figure 2.

Regarding claim 11, Yamadera discloses a device (see claim 1 rejection) wherein the main menu further comprises a main menu item icon representing a main menu item. See Figure 7A and its corresponding description.

Regarding claim 12, Yamadera discloses a device (see claim 11 rejection) wherein the device is configured to display the main menu item icon to provide a visual reference to an item in the menu tree of the menu being displayed. See Figures 7A-D and their corresponding descriptions.

Regarding claim 13, Yamadera discloses a device (see claim 12 rejection) wherein when the device displays at least a portion of the main menu, the main menu item icon is displayed in a first appearance, and when the device displays the sub-menu, the main menu item icon is displayed in a second appearance different from the first appearance. See Figures 7A-7C and their corresponding descriptions.

Regarding claim 14, Yamadera discloses a device (see claim 13 rejection) wherein the first appearance differs from the second appearance by at least one of size, shape, color, highlighting, and pattern. *Id.*

Regarding claim 15, Yamadera also teaches all the elements of dependent claim 15, except wherein when the device displays the sub-menu, the main menu item icon is displayed in a third size different from the first size and the second size. However, see MPEP 2144, changing the size of an element of the claimed invention does not patentably distinguish the claimed invention. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the size of the main menu icon to various sizes, including a different size than either the first or second size.

Regarding claim 17, Yamadera discloses a device (see claim 1 rejection) wherein the device is a phone. See Figure 1 and its corresponding description.

Regarding claim 24, Yamadera discloses a device (see claim 23 rejection) wherein the device is configured to allow scrolling between the main menu and one of the plurality of main menu items by using a first direction of the two-dimensional navigation key (paragraphs 76 to 77), to allow scrolling between the selected main menu item and the first sub-menu associated with the selected main menu item by using a second direction of the two-dimensional navigation

key (Id.), and further to allow scrolling between the second sub-menu associated with the selected main menu item and a second sub-menu item by using a third direction of the two-dimensional navigation key (paragraphs 78 to 79).

Regarding claim 25, Yamadera discloses all the elements of dependent claim 25, except wherein the third direction corresponds with the first direction of the two-dimensional navigation key. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to understand that the directions used to select the first and third directions could be the same because Yamadera teaches that the first direction may be up and the third direction may be pointed in any of four directions, up, down, right, or left. See Yamadera, paragraph 78.

Regarding claim 26, Yamadera discloses a device (see claim 23 rejection), including wherein the device is configured to display a main menu item icon to provide a visual reference to an item in a menu tree of the menu being displayed. See Figures 7A-D.

Regarding claim 28, Yamadera discloses a device (see claim 27 rejection) wherein when the menu trees have multiple sub-menu levels such that each next level is traversed by changing between the first orthogonal path and the second orthogonal path unto a lowest level is achieved wherein a selected lowest level sub-menu is activated by changing between the first orthogonal path and the second orthogonal path (see paragraphs 77-79).

Regarding claim 29, Yamadera discloses a device (see claim 27 rejection) wherein the plurality of menus includes a first sub-menu and a second sub-menu, wherein the first sub-menu further comprises a plurality of first sub-menu items (Id.) and further wherein one of the plurality

of first sub-menu items is associated to a second sub-menu (Id.) (see paragraphs 77-79 and Figures 7A-D and their corresponding descriptions).

Regarding claim 30, Yamadera discloses a device (see claim 29 rejection) wherein the second sub-menu further comprises a plurality of second sub-menu items. Figures 7A-D and their corresponding descriptions.

Regarding claim 31, Yamadera discloses a device (see claim 30 rejection), wherein a third orientation of the two-dimensional navigation key is configured to select one of the plurality of second sub-menu items. See paragraphs 77 to 81.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamadera and Landers, further in view of U.S. Patent No. 6,463,304 to Smethers.

Yamadera also teaches all the elements of dependent claim 16, except wherein the main menu further comprises a non-graphical listing of the plurality of sub-menu items of the sub-menu associated with the selected main menu item.

However, Smethers, in the same field of endeavor teaches the use of non-graphical listings in addition to icons. See e.g. Figure 3B.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use non-graphical listings in the sub-menus, for example because a listing of "content channels" is more efficient than attempting to describe them using icons, as in Smethers. See column 6, lines 35 to 45.

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PIERRE-LOUIS DESIR whose telephone number is (571)272-7799. The examiner can normally be reached on Monday-Friday 9:00AM- 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571)272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pierre-Louis Desir/  
Examiner, Art Unit 2617

/Dwayne D. Bost/  
Supervisory Patent Examiner,  
Art Unit 2617